modulating devices in a two dimensional array of N (a real number) pixels, from which raster elements are to be generated;

(b) a raster multiplying system comprising an array of mutually connected balanced lightsplitters, each said splitter to deflect a proportional part of the array of N pixels of the complimentary screen as a light beam and transmit the rest of said array to next splitter, to simultaneously form P copies of the raster elements of the complimentary screen, one copy for each of P blocks;

(c) an array of controllable modulators to simultaneously and independently modulate each of the raster elements for each of said P blocks, each modulator having an output to coincide with a block of the image; and

(d) a surface on which an image with a resolution of M pixels is formed and displayed, comprised of said P blocks, a said block comprising a two dimensional array of pixels, where the number M exceeds number N where said components of (a), (b), (c), (d) are placed in the mentioned order of the light path of the complimentary screen.

49. A system as in claim 48, comprising a plurality of modulators for each of said P blocks.

50. A system as in claim 48, comprising a plurality of said complimentary screens.

51. A system as in claim 48 further comprising a holograph generator for producing one of a two or three dimensional holographic image on said surface.

52. A system as in claim 51 wherein a lens raster matrix forms said raster multiplying system, there being one lens for each block of said P blocks.

53. A system as in claim 52, wherein a light focusing hologram forms said raster multiplying system, there being one said hologram for each block of said P blocks.

54. A system for image recording comprising:

(a) a complimentary screen having a two dimensional array of N (a real number) pixels, from which raster elements are to be generated.

(b) a raster multiplying system comprising an array of mutually connected balanced lightsplitters, each said splitter to deflect a proportional part of the array of N pixels of said complimentary screen as a light beam and transmit the rest of said array to a next splitter, to simultaneously form P copies of said complimentary screen raster elements, one copy for each of P blocks;

(c) a photosensitive plane on which an outer image to be recorded is produced, said image presented as comprising a plurality of blocks, each block being of a two dimensional array of pixels, and all said blocks comprising M pixels, where

number M exceeds number N; and where said system components of (a), (b), (c) are placed in the mentioned order of the light path of the complimentary screen; and

(d) means to scan said plane information into electric signals for recording.

55. A system as in claim 54 further comprising a plurality of said complimentary screen.

56. A system as in claim 54 further comprising means for optic compression of generated raster elements for increasing the dot per inch resolution of a scanning light beam.

57. A method for forming an image on an image display surface by simultaneous forming P constituent blocks of said image, so that image is presented as comprised of plurality of blocks, a block having a two dimensional array of pixels, comprising the steps of:

(a) providing a complimentary screen having a two dimensional array of N pixels to generate an element of a raster for a block of an image;

(b) using an array of balanced beam splitters, partly transmitting and partly deflecting incoming light, to separate a raster element corresponding one beam into a plurality of beam components to simultaneously form P copies of said raster

element one coy for each of P blocks;

(c) transmitting the formed beam components to an array of controllable modulators to independently modulate each raster element copy in accordance with control signals applied for each of said P blocks; and

(d) repeating the procedure successively generating other raster elements from said complimentary screen using the same, beamsplitters to simultaneously form a modulated raster in each of P blocks; and

(e) displaying said P blocks on an image display plane in the form of an image; said image having a resolution of M pixels, where M is greater than N.

#3 Cont

58. A method as in claim 57 further comprising the step of using a plurality of complimentary screens.

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59. A method as in claim 57 wherein a raster element comprises more than one pixel and different raster elements overlap on said image display plane.

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60. A method as in claim 59, further comprising the step of subjecting generated raster elements to additional optical compression for increasing dot per inch resolution of a sensitive plane scanning beam.

61. A method as in claim 57 wherein a raster element is of the size of

a pixel.

62. A method as in claim 57 wherein the step of forming said plurality of blocks of an image to be displayed comprises immediate synthesizing fragments of a hologram without the use of a reference beam, and further comprising the step of generating said hologram as either two or three dimensional holographic image on said image display plane.

63. A method as in claim 62 comprising the use of lens raster matrix instead of an array of balanced beam splitters.

64. A method as in claim 63 using light focusing holograms instead of lenses.

65. A method for image forming as in claim 57 used for producing a hard copy of an electrically formed holographic image, further comprising the step of:

generating a holographic image;

projecting the formed image on a photosensitive material;

forming a hologram on a photosensitive material; and

developing the photosensitive material.

66. A method of recording an outer image of M pixels, formed on a photosensitive plane, the image comprising a plurality of blocks, a block having a two dimensional array of pixels, by simultaneous scanning P constituent blocks of said image, comprising the steps of:

(a) using a complimentary screen, having a two dimensional array N (a real number) of pixels, where N is less than M, to generate an element of a raster for a block of an image;

(b) using an array of balanced beam splitters, partly transmitting and partly deflecting incoming light, to separate a raster element corresponding to one beam into many beam components to simultaneously form P copies of said raster element, one element copy for one of P blocks;

(c) converting the image information received on said plane by the projection of said beam components into P electric signals, one signal for one of said P blocks, for recording received information for P separate image elements;

(d) repeating the procedure by successively generating other raster elements on said complimentary screen, to simultaneously scan each of P blocks.

67. A method as in claim 66 wherein a raster element comprises a plurality of pixels and different raster elements overlap on said image display plane.

68. A method as in claim 66 wherein a raster element is of the size of a pixel.